

Mineral Industry Surveys

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CRUSHED STONE AND SAND AND GRAVEL IN THE FIRST QUARTER 2002

An estimated 283 million metric tons of *crushed stone* were produced and shipped for consumption in the United States in the first quarter of 2002, an increase of 0.8% compared with the same period of 2001.

The estimated U.S. output of *construction sand and gravel* produced and shipped for consumption in the first quarter of 2002 was 188 million metric tons, an increase of 1.5% compared with the same period of 2001.

The above estimates are based on information reported to the U.S. Geological Survey quarterly sample survey by the *crushed stone* and *sand and gravel* producers. The small increases in the production of *crushed stone* and *construction sand and gravel* were mostly due to the unfavorable weather conditions in some regions of the country and a slowdown in the commercial and private construction work during March. In the first quarter of 2002, there was a slight decrease in portland cement consumption, compared with the same period of 2001.

The information produced by the USGS quarterly survey on domestic production of *crushed stone* and *construction sand and gravel* has become a significant indicator of construction activity at the national as well as State level. This survey is a sample survey that generates production-for-consumption estimates by quarters for each State, except Alaska and Hawaii, and each geographic division, based on information reported voluntarily by a limited number of producing companies. Occasionally, the number of companies reporting in an area varies from quarter to quarter, or previously reported data by some companies are revised. As a result of such changes in the size or the composition of the statistical sample, the estimated quantities for prior quarters are recalculated. The latest release of the quarterly Mineral Industry Surveys contains the most recent estimated totals and percentage changes and supersedes previously published similar information.

The production-for-consumption estimates for *crushed stone* and *construction sand and gravel* are generated independently for each State and geographic division, which are treated as separate statistical sample areas. Therefore, some differences may exist between the total for a division and the sum of State totals that are part of the same geographic division.

The estimated U.S. *crushed stone* sold or used in the first quarter of 2002 decreased in two geographic divisions. The decreases were recorded in the East North Central (-5.7%) and the East South Central (-1.4%) divisions. The largest increases in the production of *crushed stone* were recorded in the West South Central (5.3%) and the Pacific (2.4%) divisions.

The leading geographic divisions in the production of *crushed stone* sold or used in the first quarter of 2002 were the South Atlantic with 77.8 million metric tons, or 27.5% of the U.S. total, followed by the West South Central with 51.5 million metric tons, or 18.2%, and the East North Central with 36.3 million metric tons, or 12.8%.

The estimated U.S. *construction sand and gravel* sold or used in the first quarter of 2002 decreased in five geographic divisions. The largest decreases were recorded in the West North Central (-8.8%), the East North Central (-8.4%), and the Mountain (-4.2%) divisions. The largest increases were recorded in the East South Central (18.3%), the Pacific (9.8%), and the West South Central (9.0%) divisions.

The leading geographic divisions for the total amount of *construction sand and gravel* sold or used in the first quarter of 2002 were the Pacific with 43.8 million metric tons, or 23.3% of the U.S. total, followed by the Mountain with 41.1 million metric tons, or 21.9%, and the West South Central with 28.7 million metric tons, or 15.3%. The estimated totals by quarters for the geographic divisions do not include Alaska and

Hawaii.

Production-for-consumption of *crushed stone* in the first quarter of 2002 declined in 22 of the 40 estimated States, with the largest percentage decreases occurring in South Dakota (-31.8%), New Jersey (-29.8%), Wisconsin (-26.1%), Utah (-18.2%), and Washington (-15.5%). The five leading States in the production-for-consumption of *crushed stone* in the first quarter of 2002 were Texas, Florida, Georgia, Missouri, and Pennsylvania. Their combined total production-for-consumption represented 36.9% of the U.S. total.

Production-for-consumption of *construction sand and gravel* declined in 24 of the 45 estimated States, with major percentage decreases occurring in Minnesota (-40.0%), South Dakota (-39.1%), Utah (-38.3%), Kentucky (-36.6%), and Idaho (-30.5%). The five leading States in the production-for-consumption of *construction sand and gravel* in the first quarter of 2002 were California, Texas, Arizona, Washington, and Nevada. Their combined total production-for-consumption

represented 44.5% of the U.S. total.

A total of 334 companies representing *crushed stone* and *construction sand and gravel* producers reported production-for-consumption information to the first quarter sample survey. The large participation of the producing companies in this survey is reflected by the high percentage coverage obtained for most geographic divisions and States. The percentage coverage indicates how much of the total estimated production-for-consumption for a State or a geographic division was actually reported by companies participating in this survey and was used to generate the estimated totals for that particular area.

The percent changes between the estimated production-for-consumption for the current quarter and the same quarter of the prior year included in this report are important indicators of the production/consumption trends occurring in a particular area of the country.

NOTICE

Readers interested in receiving notifications by e-mail when a new USGS publication on crushed stone and sand and gravel is released, may now subscribe to our publication news list service. Subscribers to this service will receive a notification by e-mail, informing them that a new USGS publication on aggregates is available.

To subscribe to the list service, send an e-mail to listproc@listserver.usgs.gov and include the "subscribe" command in the BODY of the message, as follows:

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TABLE 1
CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY DIVISION 1/

(Thousand metric tons and thousand dollars)

Region/Division	2001						2002			
	Quantity					Value total 2/	Quantity 1st qtr.	Per- cent change 3/	Percent cover- age	Number of cos. 4/
	1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	Total 2/					
Northeast:										
New England	3,200	10,900	12,200	9,800	36,100	247,000	3,200	1.7	68	15
Middle Atlantic	22,900	54,100	58,200	47,100	182,000	1,090,000	23,000	0.6	63	30
Midwest:										
East North Central	38,500	80,800	93,500	77,700	291,000	1,340,000	36,300	-5.7	66	41
West North Central	27,000	43,700	49,600	42,900	163,000	886,000	27,500	1.9	53	37
South:										
South Atlantic	76,700	102,000	102,000	93,600	374,000	2,300,000	77,800	1.4	84	48
East South Central	32,600	47,100	48,400	43,700	172,000	1,040,000	32,200	-1.4	68	16
West South Central	48,900	63,300	61,500	53,400	227,000	993,000	51,500	5.3	61	26
West:										
Mountain	11,200	15,700	16,700	13,000	56,600	308,000	11,200	0.4	39	21
Pacific 5/	20,000	27,100	27,300	24,400	98,900	610,000	20,500	2.4	44	29
Total 2/	281,000	445,000	469,000	406,000	1,620,000 6/	8,950,000 6/	283,000	0.8	XX	XX

XX Not applicable.

1/ Quarterly totals shown are estimates based on a sample survey. Estimated quantities for prior quarters have been recalculated.

2/ Data may not add to totals shown because of independent rounding, and differences between projected totals by States and by divisions.

3/ All percentage changes are calculated using unrounded totals.

4/ Number of companies reporting for the quarterly survey.

5/ Does not include Alaska and Hawaii.

6/ Includes Alaska, Hawaii, and "Other" totals; see table 2, footnote 7.

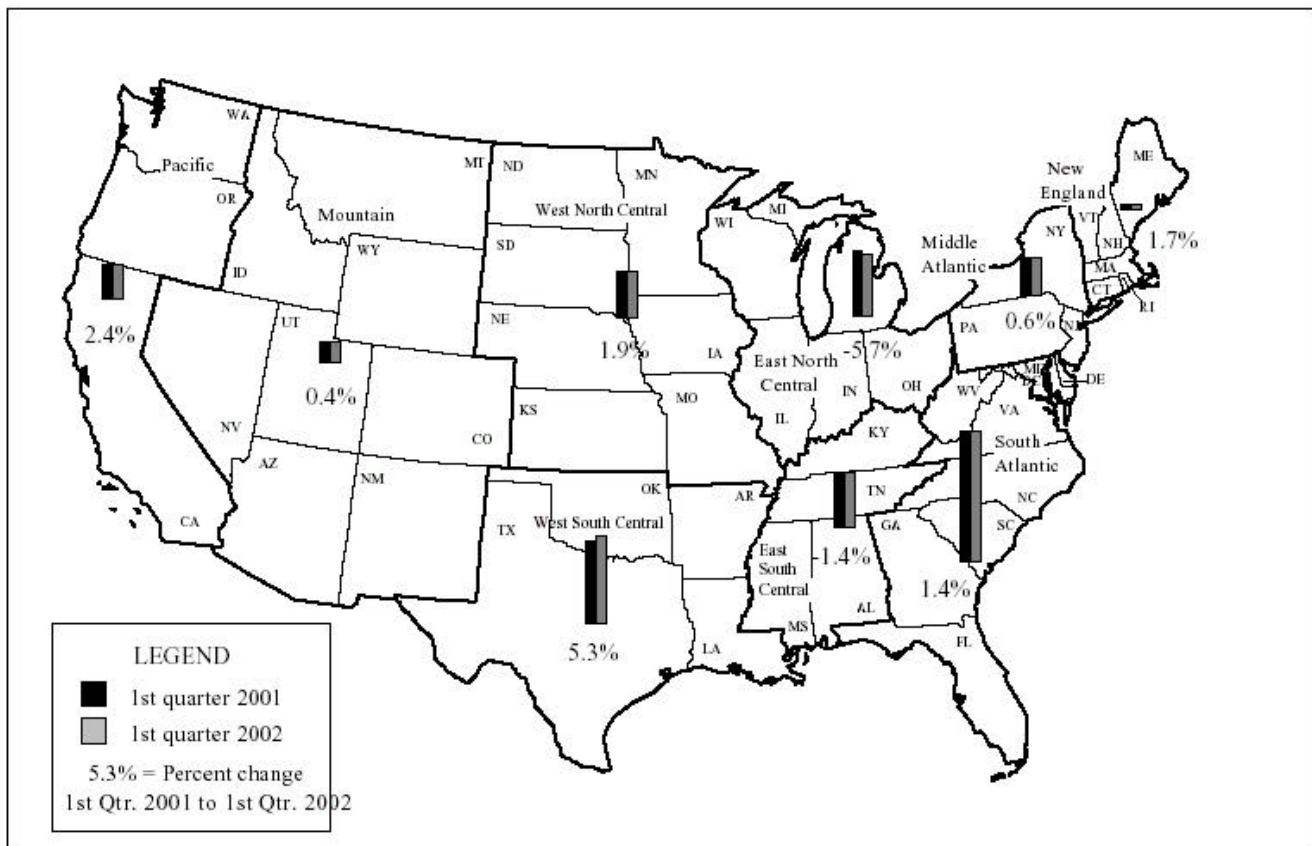


Figure 1 - First quarter crushed stone production by geographic division

TABLE 2
CRUSHED STONE SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE 1/

(Thousand metric tons and thousand dollars)

State	2001						2002			
	Quantity					Value total 2/	Quantity 1st qtr.	Per- cent change 3/	Percent cover- age	Number of cos. 4/
	1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	Total 2/					
Alabama	10,700	13,400	14,000	12,400	50,500	318,000	11,000	2.5	72	11
Alaska	(5/)	(5/)	(5/)	(5/)	1,500	7,850	(5/)	(5/)	(5/)	(5/)
Arizona	(6/)	(6/)	(6/)	(6/)	7,000	43,300	(6/)	(6/)	(6/)	(6/)
Arkansas	5,800	9,000	9,700	8,500	33,000	165,000	6,400	9.9	66	9
California	12,200	16,700	17,000	15,100	61,000	393,000	12,900	5.8	48	13
Colorado	2,700	3,800	3,800	3,200	13,500	87,700	3,000	11.5	61	6
Connecticut	500	2,100	2,300	2,000	7,000	60,900	500	(4.9)	110	4
Delaware	(5/)	(5/)	(5/)	(5/)	(5/)	(5/)	(5/)	(5/)	(5/)	(5/)
Florida	20,700	23,100	22,700	23,500	90,000	494,000	24,400	18.2	69	10
Georgia 7/	16,900	20,300	20,400	18,400	76,000	463,000	16,400	(2.5)	101	7
Hawaii	(5/)	(5/)	(5/)	(5/)	5,000	51,900	(5/)	(5/)	(5/)	(5/)
Idaho	1,000	800	1,600	1,400	4,800	20,800	900	(11.6)	37	4
Illinois 7/	10,700	20,900	24,600	21,800	78,000	417,000	10,000	(6.7)	71	11
Indiana	8,500	15,200	18,100	14,200	56,000	264,000	8,100	(5.1)	83	13
Iowa	4,500	11,000	11,800	10,700	38,000	204,000	5,000	11.5	50	6
Kansas	4,200	5,200	6,100	5,900	21,400	107,000	4,300	1.3	65	9
Kentucky	10,400	16,300	16,300	14,600	57,600	316,000	10,300	(1.0)	60	7
Louisiana	(6/ 7/)	(6/ 7/)	(6/ 7/)	(6/ 7/)	(6/ 7/)	(6/ 7/)	(6/ 7/)	(6/ 7/)	(6/ 7/)	(6/ 7/)
Maine	400	1,000	1,200	800	3,400	20,200	400	6.7	67	4
Maryland 7/	3,800	6,500	7,100	6,600	24,000	139,000	4,600	19.3	109	9
Massachusetts	1,400	3,900	4,900	3,800	14,000	111,000	1,500	7.1	70	6
Michigan 7/	4,000	13,200	14,000	11,400	42,500	154,000	3,800	(5.3)	59	9
Minnesota	1,100	3,900	6,200	3,700	15,000	85,000	1,000	(11.6)	22	3
Mississippi	(6/ 7/)	(6/ 7/)	(6/ 7/)	(6/ 7/)	3,300	31,800	(6/ 7/)	(6/ 7/)	(6/ 7/)	(6/ 7/)
Missouri	14,000	19,400	22,400	19,500	75,300	410,000	14,500	3.4	48	14
Montana	(6/)	(6/)	(6/)	(6/)	3,200	13,600	(6/)	(6/)	(6/)	(6/)
Nebraska	1,400	2,500	2,200	1,900	8,100	53,600	1,500	2.0	101	6
Nevada	2,100	2,200	2,200	2,000	8,400	42,200	1,800	(12.2)	32	4
New Hampshire 7/	200	1,000	1,100	900	3,300	14,200	200	(2.2)	91	4
New Jersey	4,000	8,700	9,300	9,000	31,000	218,000	2,800	(29.8)	57	5
New Mexico	800	900	1,000	1,000	3,700	23,100	1,000	31.0	32	4
New York	4,200	15,700	17,400	12,900	50,200	322,000	5,900	38.4	72	9
North Carolina	13,400	19,500	18,700	16,800	68,400	485,000	12,300	(8.3)	97	11
North Dakota	(5/ 7/)	(5/ 7/)	(5/ 7/)	(5/ 7/)	(5/ 7/)	(5/ 7/)	(5/ 7/)	(5/ 7/)	(5/ 7/)	(5/ 7/)
Ohio	10,200	22,500	25,800	21,600	80,000	366,000	9,900	(2.0)	72	12
Oklahoma	10,600	13,600	13,500	11,400	49,000	216,000	10,300	(2.0)	49	9
Oregon	3,700	5,000	6,300	4,800	19,800	96,900	3,700	1.2	50	11
Pennsylvania	15,000	29,500	31,200	25,300	101,000	553,000	14,300	(4.5)	61	20
Rhode Island	(6/)	(6/)	(6/)	(6/)	3,300	19,300	(6/)	(6/)	(6/)	(6/)
South Carolina	5,900	7,300	7,300	6,700	27,200	180,000	5,800	(1.6)	80	5
South Dakota	800	1,400	1,900	1,300	5,400	26,000	600	(31.8)	100	6
Tennessee	10,800	16,700	17,200	15,800	60,500	372,000	10,200	(6.3)	74	8
Texas	32,400	40,900	38,200	33,400	145,000	612,000	34,800	7.3	62	12
Utah	1,700	3,500	3,700	2,100	11,000	56,000	1,400	(18.2)	50	5
Vermont	(6/)	(6/)	(6/)	(6/)	5,100	21,600	(6/)	(6/)	(6/)	(6/)
Virginia	14,000	21,400	20,500	18,100	74,000	470,000	12,700	(9.5)	71	12
Washington	4,900	5,900	2,700	4,600	18,100	120,000	4,200	(15.5)	21	3
West Virginia 7/	2,100	3,800	5,100	3,500	14,500	65,400	2,100	3.2	58	6
Wisconsin	5,200	9,200	11,100	8,500	34,000	143,000	3,800	(26.1)	23	5
Wyoming	1,100	1,700	1,200	1,000	5,000	21,500	1,200	5.8	27	4
Other	XX	XX	XX	XX	12,500	78,000	XX	XX	XX	XX
Total	XX	XX	XX	XX	1,620,000	8,950,000	XX	XX	XX	XX

XX Not applicable.

1/ Quarterly totals shown are estimates based on a sample survey. Estimated quantities for prior quarters have been recalculated.

2/ Data may not add to totals shown because of independent rounding and differences between projected totals by States.

3/ All percentage changes are calculated using unrounded totals.

4/ Number of companies reporting for the quarterly survey.

5/ State not included in quarterly survey.

6/ Owing to a low number of reporting companies, no production estimates by quarters were generated.

7/ To avoid disclosing proprietary data, certain State totals do not include all kinds of stone produced within the State; the portion not shown has been included with "Other."

TABLE 3
SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY DIVISION 1/

(Thousand metric tons and thousand dollars)

Region/Division	2001						2002			
	Quantity					Value total 2/	Quantity 1st qtr.	Per- cent change 3/	Percent cover- age	Number of cos. 4/
	1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	Total 2/					
Northeast:										
New England	5,700	12,200	15,400	12,000	45,200	238,000	5,500	-2.8	24	22
Middle Atlantic	9,300	20,300	23,900	15,300	68,800	382,000	9,300	-0.4	29	23
Midwest:										
East North Central	27,600	65,800	78,400	55,400	227,000	956,000	25,200	-8.4	43	44
West North Central	8,700	29,600	39,800	25,200	103,000	385,000	7,900	-8.8	34	33
South:										
South Atlantic	17,400	22,200	21,200	19,800	80,600	399,000	17,500	0.9	54	31
East South Central	7,600	12,100	11,400	10,700	41,800	195,000	9,000	18.3	38	17
West South Central	26,400	36,800	34,600	29,400	127,000	641,000	28,700	9.0	41	13
West:										
Mountain	42,900	55,300	57,600	47,900	204,000	934,000	41,100	-4.2	43	35
Pacific 5/	39,900	55,000	61,100	52,100	208,000	1,290,000	43,800	9.8	56	31
Total 2/	185,000	309,000	344,000	268,000	1,120,000 6/	5,500,000 6/	188,000	1.5	XX	XX

XX Not applicable.

1/ Quarterly totals shown are estimates based on a sample survey. Estimated quantities for prior quarters have been recalculated.

2/ Data may not add to totals shown because of independent rounding, and differences between projected totals by States and by divisions.

3/ All percentage changes are calculated using unrounded totals.

4/ Number of companies reporting for the quarterly survey.

5/ Does not include Alaska and Hawaii.

6/ Includes Alaska and Hawaii.

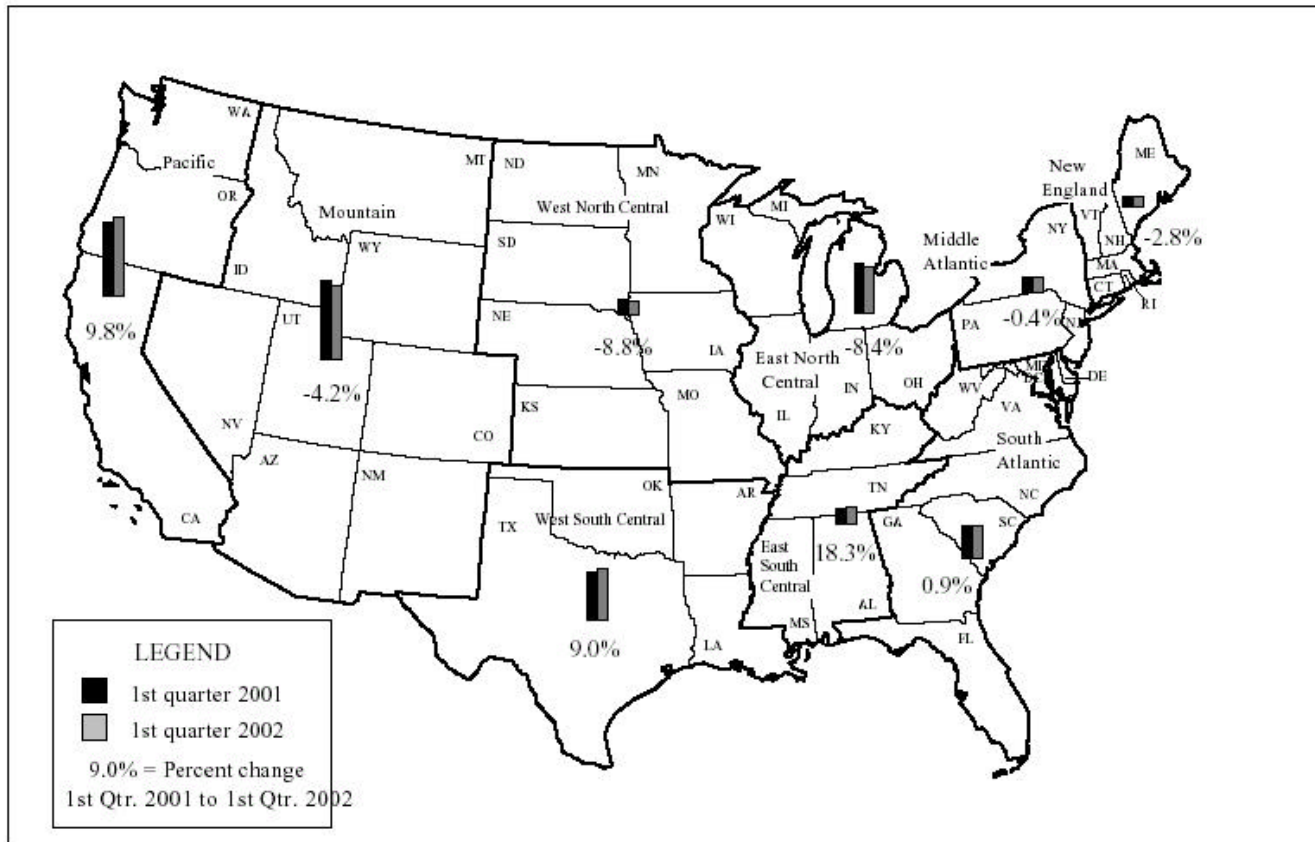


Figure 2 - First quarter sand and gravel production by geographic division

TABLE 4
SAND AND GRAVEL SOLD OR USED BY PRODUCERS IN THE UNITED STATES, BY STATE 1/

(Thousand metric tons and thousand dollars)

State	2001						2002			
	Quantity					Value	Quantity	Per- cent change 3/	Percent cover- age	Number of cos. 4/
	1st qtr.	2nd qtr.	3rd qtr.	4th qtr.	Total 2/	total 2/				
Alabama	3,000	3,500	3,400	3,100	13,000	58,100	2,900	(4.8)	45	7
Alaska	(5/)	(5/)	(5/)	(5/)	14,000	71,800	(5/)	(5/)	(5/)	(5/)
Arizona	14,800	14,700	14,100	13,000	56,600	294,000	15,200	2.9	68	8
Arkansas	1,900	2,900	3,400	2,500	10,700	53,800	2,100	10.6	54	3
California	28,700	39,400	42,100	37,800	148,000	953,000	31,800	10.5	62	16
Colorado	6,600	10,500	12,800	9,600	39,500	197,000	5,900	(10.2)	41	8
Connecticut	1,200	2,100	2,100	1,800	7,200	42,700	1,000	(14.1)	31	6
Delaware	(6/)	(6/)	(6/)	(6/)	2,420	13,100	(6/)	(6/)	(6/)	(6/)
Florida	5,800	6,400	6,100	6,200	24,600	110,000	6,300	7.7	64	8
Georgia	1,600	1,900	1,800	1,700	7,000	29,400	1,600	2.4	42	6
Hawaii	(5/)	(5/)	(5/)	(5/)	650	6,970	(5/)	(5/)	(5/)	(5/)
Idaho	2,400	6,500	5,600	2,700	17,200	55,500	1,700	(30.5)	23	3
Illinois	3,300	7,000	12,200	6,900	29,500	130,000	2,700	(18.7)	53	8
Indiana	5,900	8,600	7,600	6,100	28,200	124,000	5,500	(6.3)	52	7
Iowa	1,000	3,900	4,800	3,600	13,300	59,400	1,200	20.1	55	6
Kansas	1,600	3,100	3,000	2,500	10,200	29,100	1,800	8.3	22	3
Kentucky	1,800	2,300	2,300	2,100	8,500	28,300	1,100	(36.6)	17	3
Louisiana	3,000	5,200	5,100	4,100	17,400	91,300	3,600	19.0	50	3
Maine	800	2,900	3,600	2,400	9,600	37,900	600	(26.3)	16	4
Maryland	2,400	3,600	3,400	3,300	12,700	83,500	2,400	2.9	45	4
Massachusetts	2,200	3,200	4,000	3,800	13,200	81,300	2,200	(0.1)	20	6
Michigan	6,700	24,600	26,800	19,100	77,200	279,000	5,700	(14.3)	39	10
Minnesota	1,200	9,600	15,900	8,800	35,500	144,000	700	(40.0)	43	10
Mississippi	1,600	3,600	3,600	3,600	12,400	65,600	2,700	70.4	50	5
Missouri	1,900	3,300	3,600	2,700	11,500	45,400	1,400	(25.2)	51	4
Montana	800	2,600	4,700	3,000	11,000	45,600	1,300	69.9	42	3
Nebraska	1,500	3,500	3,700	2,100	10,700	36,300	1,900	29.6	28	5
Nevada	7,800	9,700	6,900	8,700	33,100	157,000	7,400	(5.2)	20	5
New Hampshire	1,100	2,500	3,500	2,400	9,500	46,100	1,100	5.8	33	5
New Jersey	3,300	5,400	5,100	4,100	17,900	94,800	3,100	(7.5)	25	5
New Mexico	2,600	3,400	3,200	2,700	12,000	60,600	2,600	(0.8)	37	5
New York	3,500	8,800	12,500	6,000	30,800	162,000	3,800	8.5	26	10
North Carolina	2,600	3,000	2,900	2,300	10,800	54,000	2,300	(13.0)	32	4
North Dakota	(5/)	(5/)	(5/)	(5/)	10,600	28,200	(5/)	(5/)	(5/)	(5/)
Ohio	6,700	15,600	19,000	13,700	55,000	280,000	6,700	(0.1)	50	15
Oklahoma	2,100	2,800	2,800	2,400	10,100	39,500	2,300	9.3	50	5
Oregon	2,800	4,400	6,700	5,100	19,000	114,000	3,500	26.0	38	5
Pennsylvania	2,600	6,000	6,600	4,900	20,100	125,000	2,500	(2.4)	38	10
Rhode Island	(6/)	(6/)	(6/)	(6/)	1,120	9,000	(6/)	(6/)	(6/)	(6/)
South Carolina	2,400	2,700	2,800	2,200	10,100	40,500	2,000	(17.3)	46	4
South Dakota	1,300	3,600	4,100	2,500	11,500	42,500	800	(39.1)	16	6
Tennessee	1,400	2,700	2,000	1,700	7,910	43,100	1,900	33.9	33	5
Texas	19,700	25,900	23,000	20,400	89,000	456,000	21,100	6.6	36	9
Utah	4,700	7,800	8,700	6,600	27,800	99,500	2,900	(38.3)	40	4
Vermont	300	1,100	1,900	1,300	4,600	21,300	400	35.1	24	4
Virginia	2,300	3,400	2,900	2,700	11,200	59,200	2,100	(6.6)	59	7
Washington	8,100	11,100	13,200	8,800	41,100	221,000	8,100	0.2	40	6
West Virginia	200	600	500	400	1,780	8,930	200	8.4	96	5
Wisconsin	4,000	10,400	12,600	10,300	37,300	143,000	3,600	(9.9)	25	10
Wyoming	1,000	1,800	2,000	1,700	6,510	24,800	900	(7.7)	25	4
Total	XX	XX	XX	XX	1,120,000	5,500,000	XX	XX	XX	XX

XX Not applicable.

1/ Quarterly totals shown are estimates based on a sample survey. Estimated quantities for prior quarters have been recalculated.

2/ Data may not add to totals shown because of independent rounding and differences between projected totals by States.

3/ All percentage changes are calculated using unrounded totals.

4/ Number of companies reporting for the quarterly survey.

5/ State not included in quarterly survey.

6/ Owing to a low number of reporting companies, no production estimates by quarters were generated.